SEQUENCE LISTING

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MORETTA, ALESSANDRO
OLCESE, LUCIA
VELY, FREDERIC
TOMASELLO, ELENA

<120> NEW POLYPEPTIDES ASSOCIATED WITH ACTIVATORY RECEPTORS
AND THEIR BIOLOGICAL APPLICATIONS

<130> 1721-18

<140> 09/403,980
<141> 2000-01-19

<150> PCT/FR98/00883
<151> 1998-04-30

<150> FR 97/05411
<151> 1997-04-30

<150> FR 98/00927
<151> 1998-01-28

<160> 44

<170> PatentIn Ver. 2.1

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taagtcccgt acaggcc cag agt gac act ttc cca aga tgc gac tgt tct 170
Gln Ser Asp Thr Phe Pro Arg Cys Asp Cys Ser
1 5 10

tcc gtg agc cct ggt gta ctg tct ggg att gtt ctg ggt gac ttg gtg 218
Ser Val Ser Pro Gly Val Leu Ser Gly Ile Val Leu Gly Asp Leu Val
15 20 25

ttg act ctg ctg att gcc ctg gct gtg tac tct ctg ggc cgc ctg gtc 266
Leu Thr Leu Leu Ile Ala Leu Ala Val Tyr Ser Leu Gly Arg Leu Val
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tcc cga ggt caa ggg aca gcg gaa ggg acc cgg aaa caa cac att gct 314
Ser Arg Gly Gln Gly Thr Ala Glu Gly Thr Arg Lys Gln His Ile Ala

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Glu Thr Glu Ser Pro Tyr Gln Glu Leu Gln Gly Gln Arg His Glu Val
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tac agt gac ctc aac aca cag agg caa tat tac aga tgagcccact        408
Tyr Ser Asp Leu Asn Thr Gln Arg Gln Tyr Tyr Arg
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ctatgcccat cagcggcctg atgcccggat ccggtcattc cagatgccta ctcaacaagc 468

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<213> Mus musculus

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Ala Leu Ala Val Tyr Ser Leu Gly Arg Leu Val Ser Arg Gly Gln Gly
         35                  40                  45

Thr Ala Glu Gly Thr Arg Lys Gln His Ile Ala Glu Thr Glu Ser Pro
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Tyr Gln Glu Leu Gln Gly Gln Arg His Glu Val Tyr Ser Asp Leu Asn
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Thr Gln Arg Gln Tyr Tyr Arg
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<213> Mus musculus

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<212> PRT
<213> Mus musculus

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<212> DNA

<213> Mus musculus

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tggtctcccg aggtcaaggg acagcggaag ggacccggaa acaacacatt gctgagactg 240
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ccagagtgac actttcccaa gatgcgactg ttcttccgtg agccctggtg tactggctgg 180
gattgttctg ggtgacttgg tgttgactct gctgattgcc ctggctgtgt actctctggg 240
ccgcctggtc tcccgaggtc aagggacagc ggaagggacc cggaaacaac acattgctga 300
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cacacagagg caatattaca gatgagccac tctatgccca tc 402

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<211> 482
<212> DNA
<213> Mus musculus

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<210> 11
<211> 171
<212> PRT
<213> Mus musculus

<220>
<221> MOD_RES
<222> (133)
<223> Any amino acid

<400> 11
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1 5 10 15

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Trp Pro Pro Trp Gly Ser Gly Ala Ser Trp Cys Leu Leu Phe Leu Pro
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Val Leu Leu Thr Val Gly Gly Leu Ser Pro Val Gln Ala Gln Ser Asp
         35                  40                  45

Thr Phe Pro Arg Cys Asp Cys Ser Ser Val Ser Pro Gly Val Leu Ser
     50                  55                  60

Gly Ile Val Leu Gly Asp Leu Val Leu Thr Leu Leu Ile Ala Leu Ala
 65                  70                  75                  80

Val Tyr Ser Leu Gly Arg Leu Val Ser Arg Gly Gln Gly Thr Ala Glu
                 85                  90                  95

Gly Thr Arg Lys Gln His Ile Ala Glu Thr Glu Ser Pro Tyr Gln Glu
            100                 105                 110

Leu Gln Gly Gln Arg His Glu Val Tyr Ser Asp Leu Asn Thr Gln Arg
        115                 120                 125

Gln Tyr Tyr Arg Xaa Ala His Ser Met Pro Ile Ser Gly Leu Met Pro
    130                 135                 140

Gly Ser Gly His Ser Arg Cys Leu Leu Asn Lys Pro Ser Leu Arg Ser
145                 150                 155                 160

Gly Leu Pro Leu Glu Tyr Arg Ser Thr Gly Tyr
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<210> 12
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<212> PRT
<213> Mus musculus

<220>
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<222> (120)
<223> Any amino acid

<400> 12

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             20                  25                  30

Gln Ser Asp Thr Phe Pro Arg Cys Asp Cys Ser Ser Val Ser Pro Gly
         35                  40                  45

Val Leu Ala Gly Ile Val Leu Gly Asp Leu Val Leu Thr Leu Leu Ile
     50                  55                  60

Ala Leu Ala Val Tyr Ser Leu Gly Arg Leu Val Ser Arg Gly Gln Gly
 65                  70                  75                  80
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Thr Ala Glu Gly Thr Arg Lys Gln His Ile Ala Glu Thr Glu Ser Pro
85 90 95

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100 105 110

Thr Gln Arg Gln Tyr Tyr Arg Xaa Ala His Ser
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<210> 13
<211> 124
<212> PRT
<213> Mus musculus

<220>
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<222> (106)
<223> Any amino acid

<400> 13
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1 5 10 15

Gln Ala Gln Ser Asp Thr Phe Pro Arg Cys Gly Cys Ser Ser Val Ser
20 25 30

Pro Gly Val Leu Ala Gly Ile Val Leu Gly Asp Leu Val Leu Thr Leu
35 40 45

Leu Ile Ala Leu Ala Val Tyr Ser Leu Gly Arg Leu Val Ser Arg Gly
50 55 60

Gln Gly Thr Ala Glu Gly Thr Arg Lys Gln His Ile Ala Glu Thr Glu
65 70 75 80

Ser Pro Tyr Gln Glu Leu Gln Gly Gln Arg His Glu Val Tyr Ser Asp
85 90 95

Leu Asn Thr Gln Arg Gln Tyr Tyr Arg Xaa Ala His Ser Met Pro Ile
100 105 110

Ser Gly Leu Met Pro Gly Ser Gly His Ser Arg Cys
115 120

<210> 14
<211> 133
<212> PRT
<213> Mus musculus

<220>
<221> MOD_RES
<222> (128)
<223> Any amino acid

<400> 14
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1 5 10 15

Ser Gly Ala Ser Trp Cys Leu Leu Phe Leu Pro Val Leu Leu Thr Val
20 25 30

Gly Gly Leu Ser Pro Val Gln Ala Gln Ser Asp Thr Phe Pro Arg Cys
35 40 45

Asp Cys Ser Ser Val Ser Pro Gly Val Leu Ala Gly Ile Val Leu Gly
50 55 60

Asp Leu Val Leu Thr Leu Leu Ile Ala Leu Ala Val Tyr Ser Leu Gly
65 70 75 80

Arg Leu Val Ser Arg Gly Gln Gly Thr Ala Glu Gly Thr Arg Lys Gln
85 90 95

His Ile Ala Glu Thr Glu Ser Pro Tyr Gln Glu Leu Gln Gly Gln Arg
100 105 110

Pro Glu Val Tyr Ser Asp Leu Asn Thr Gln Arg Gln Tyr Tyr Arg Xaa
115 120 125

Ala Thr Leu Cys Pro
130

<210> 15
<211> 160
<212> PRT
<213> Mus musculus

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<221> MOD_RES
<222> (104)
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<222> (148)
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<220>
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<222> (157)

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1 5 10 15

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Val Leu Ala Gly Ile Val Leu Gly Asp Leu Val Leu Thr Leu Leu Ile
        35                  40                  45

Ala Leu Ala Val Tyr Ser Leu Gly Arg Leu Val Ser Arg Gly Gln Gly
    50                  55                  60

Thr Ala Glu Gly Thr Arg Lys Gln His Ile Ala Glu Thr Glu Ser Pro
65                  70                  75                  80

Tyr Gln Glu Leu Gln Gly Gln Arg Pro Glu Val Tyr Ser Asp Leu Asn
                85                  90                  95

Thr Gln Arg Arg Tyr Tyr Arg Xaa Ala His Ser Met Pro Ile Ser Gly
            100                 105                 110

Leu Met Pro Gly Ser Gly His Ser Arg Cys Leu Leu Asn Lys Pro Phe
        115                 120                 125

Cys Gly Ile Arg Thr Pro Val Gly Ile Gln Ile His Arg Val Pro Pro
    130                 135                 140

Xaa Asp Ile Xaa His Cys Thr Ile Ser Val Pro Lys Xaa Lys Thr Asp
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<213> Artificial Sequence

<220>
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<210> 17
<211> 126
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Consensus

sequence

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<222> (108)
<223> Any amino acid

<400> 17
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Pro Val Gln Ala Gln Ser Asp Thr Phe Pro Arg Cys Asp Cys Ser Ser
20 25 30

Val Ser Pro Gly Val Leu Ala Gly Ile Val Leu Gly Asp Leu Val Leu
35 40 45

Thr Leu Leu Ile Ala Leu Ala Val Tyr Ser Leu Gly Arg Leu Val Ser
50 55 60

Arg Gly Gln Gly Thr Ala Glu Gly Thr Arg Lys Gln His Ile Ala Glu
65 70 75 80

Thr Glu Ser Pro Tyr Gln Glu Leu Gln Gly Gln Arg Pro Glu Val Tyr
85 90 95

Ser Asp Leu Asn Thr Gln Arg Gln Tyr Tyr Arg Xaa Ala His Ser Met
100 105 110

Pro Ile Ser Gly Leu Met Pro Gly Ser Gly His Ser Arg Cys
115 120 125

<210> 18
<211> 2838
<212> DNA
<213> Mus musculus

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<210> 19
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

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<210> 20
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 20
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<210> 21

<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 21
agtcccgtac aggcccagag t 21

<210> 22
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 22
cagagtcaac accaagtcac c 21

<210> 23
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 23
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<210> 24
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 24
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<210> 25
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 25
caacacattg ctgagactga g 21

<210> 26
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 26
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<210> 27
<211> 452
<212> DNA
<213> Mus musculus

<220>
<221> CDS
<222> (1)..(333)

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ctg act gtg gag gga tta agt ccc gta cag gcc cag agt gac act ttc 96
Leu Thr Val Glu Gly Leu Ser Pro Val Gln Ala Gln Ser Asp Thr Phe
20 25 30

cca aga tgc gac tgt tct tcc gtg agc cct ggt gta ctg gct ggg att 144
Pro Arg Cys Asp Cys Ser Ser Val Ser Pro Gly Val Leu Ala Gly Ile
35 40 45

gtt ctg ggt gac ttg gtg ttg act ctg ctg att gcc ctg gct gtg tac 192
Val Leu Gly Asp Leu Val Leu Thr Leu Leu Ile Ala Leu Ala Val Tyr
50 55 60

tct ctg ggc cgc ctg gtc tcc cga ggt caa gag agg acc cgg aaa caa 240
Ser Leu Gly Arg Leu Val Ser Arg Gly Gln Glu Arg Thr Arg Lys Gln
65 70 75 80

cac att gct gag act gag tcg cct tat cag gag ctt cag ggt cag aga 288
His Ile Ala Glu Thr Glu Ser Pro Tyr Gln Glu Leu Gln Gly Gln Arg
85 90 95

cat gaa gta tac agt gac ctc aac aca cag agg caa tat tac aga 333
His Glu Val Tyr Ser Asp Leu Asn Thr Gln Arg Gln Tyr Tyr Arg
100 105 110

tgagcccact ctatgcccat cagcggcctg atgcccggat ccggtcattc cagatgccta 393

ctcaacaagc cctctctgag atcaggactc ccgttggaat acagatccac agggtacct 452

<210> 28
<211> 111
<212> PRT
<213> Mus musculus

<400> 28
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1 5 10 15

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20 25 30

Pro Arg Cys Asp Cys Ser Ser Val Ser Pro Gly Val Leu Ala Gly Ile
35 40 45

Val Leu Gly Asp Leu Val Leu Thr Leu Leu Ile Ala Leu Ala Val Tyr
50 55 60

Ser Leu Gly Arg Leu Val Ser Arg Gly Gln Glu Arg Thr Arg Lys Gln
65 70 75 80

His Ile Ala Glu Thr Glu Ser Pro Tyr Gln Glu Leu Gln Gly Gln Arg
85 90 95

His Glu Val Tyr Ser Asp Leu Asn Thr Gln Arg Gln Tyr Tyr Arg
100 105 110

<210> 29
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

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<210> 30
<211> 46
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Primer

<400> 30
ctagtctaga ggatccaggt atcattgtgc tgactgtcat gattcg 46

<210> 31
<211> 431
<212> DNA
<213> Mus musculus

<400> 31
ggcttcgttt tctgttctgc gccgttacag atccaagctc ctcgagggct tcatgggggg 60
acttgaaccc tgcagcaggc tcctgctcct gcctctcctg ctggctgtaa gtggtctccg 120
tcctgtccag gcccaggccc agagcgattg cagttgctct acggtgagcc cgggcgtgct 180
ggcagggatc gtgatgggag acctggtgct gacagtgctc attgccctgg ccgtgtactt 240
cctgggccgg ctggtccctc gggggcgagg ggctgcggag gcagcgaccc ggaaacagcg 300
tatcactgag accgagtcgc cttatcagga gctccagggt cagaggtcgg atgtctacag 360
cgacctcaac acacagaggc cgtattacaa atgagcccga atcatgacag tcagcacaat 420
gatacctgga t 431

<210> 32
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 32
Tyr Asn Glu Leu Asn Leu Gly Arg Arg Glu Glu Tyr Asp Val Leu
1 5 10 15

<210> 33
<211> 16
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 33
Tyr Asn Glu Leu Gln Lys Asp Lys Met Ala Glu Ala Tyr Ser Glu Ile
1 5 10 15

<210> 34
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 34
Tyr Gln Gly Leu Ser Thr Ala Thr Lys Asp Thr Tyr Asp Ala Leu
1 5 10 15

<210> 35
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 35
Tyr Gln Pro Leu Lys Asp Arg Glu Asp Asp Gln Tyr Ser His Leu
1 5 10 15

<210> 36
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 36
Tyr Gln Pro Leu Arg Asp Arg Asp Asp Ala Gln Tyr Ser His Leu
1 5 10 15

<210> 37
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 37
Tyr Glu Pro Ile Arg Lys Gly Gln Arg Asp Leu Tyr Ser Gly Leu
1 5 10 15

<210> 38
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 38
Tyr Glu Asp Ile Ser Arg Gly Leu Gln Gly Thr Tyr Gln Asp Val
1 5 10 15

<210> 39
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 39
Tyr Glu Gly Leu Asp Ile Asp Gln Thr Ala Thr Tyr Glu Asp Ile
1 5 10 15

<210> 40
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 40
Tyr Thr Gly Leu Asp Thr Arg Asn Gln Glu Thr Tyr Glu Thr Leu
1 5 10 15

<210> 41
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 41
Tyr Glu Glu Leu Asn Ile Tyr Ser Ala Thr Tyr Ser Glu Leu
1 5 10

<210> 42
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 42
Tyr Gln Glu Leu Gln Gly Gln Arg His Glu Val Tyr Ser Asp Leu
1 5 10 15

<210> 43
<211> 109
<212> PRT
<213> Mus musculus

<400> 43

Met Gly Ala Leu Glu Pro Ser Trp Cys Leu Leu Phe Leu Pro Val Leu
1 5 10 15

Leu Thr Val Leu Gly Leu Ser Pro Val Gln Ala Gln Ser Asp Thr Phe
20 25 30

Pro Arg Cys Asp Cys Ser Ser Val Pro Gly Val Leu Ala Gly Ile Val
35 40 45

Leu Gly Asp Leu Val Leu Thr Leu Leu Ile Ala Leu Ala Tyr Ser Leu
50 55 60

Gly Arg Leu Val Ser Arg Gly Gln Glu Arg Thr Arg Lys Gln His Ile
65 70 75 80

Ala Glu Thr Glu Ser Pro Tyr Gln Glu Leu Gln Gly Gln Arg Pro Glu
85 90 95

Val Tyr Ser Asp Leu Asn Thr Gln Arg Gln Tyr Tyr Arg
100 105

<210> 44
<211> 111
<212> PRT
<213> Mus musculus

<400> 44
Met Gly Ala Leu Glu Pro Ser Trp Cys Leu Leu Phe Leu Pro Val Leu
1 5 10 15

Leu Thr Val Glu Gly Leu Ser Pro Val Gln Ala Gln Ser Asp Thr Phe
20 25 30

Pro Arg Cys Asp Cys Ser Ser Val Ser Pro Gly Val Leu Ala Gly Ile
35 40 45

Val Leu Gly Asp Leu Val Leu Thr Leu Leu Ile Ala Leu Ala Val Ile
50 55 60

Ser Leu Gly Arg Leu Val Ser Arg Gly Gln Glu Arg Thr Arg Lys Gln
65 70 75 80

His Ile Ala Arg Thr Glu Ser Pro Tyr Gln Glu Leu Gln Gly Gln Arg
85 90 95

Pro Glu Val Tyr Ser Asp Leu Arg Thr Gln Arg Gln Tyr Tyr Arg
100 105 110